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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,669	10/16/2003	Koji Kajita	CFA 00013 US	2620

7590

12/14/2006

Canon U.S.A. Inc, Intellectual Property Department  
15975 Alton Parkway  
Irvin, CA 92618-3731

EXAMINER
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WARE, CICELY Q

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/688,669	<b>Applicant(s)</b> KAJITA, KOJI	
	<b>Examiner</b> Cicely Ware	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-17 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because:
  - a. Fig. 1, examiner suggests applicant label elements as referenced in specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

3. Claim 1 is objected to because of the following informalities:
- a. Claim 1, lines 3-4, examiner suggests applicant re-write these lines for clarification purposes.
  - b. Claim 1, line 5, applicant uses "Lines", examiner suggests using "lines" for clarification purposes.
- Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyers et al. (US Patent 5,689,689).

(1) With regard to claim 1, Meyers et al. discloses in (Fig. 5) an electronic device having a main control portion connected to a plurality of sub-processing portions, portion for controlling the electronic device, for executing specific functions, said electronic device comprising: a plurality of signal lines, each for transmitting a test signal from said main control portion to a sub-processing portion (abstract, col. 2, lines 29-44); generating unit for generating predetermined packet data to said sub-processing portions (col. 4, lines 50-67, col. 5, lines 1-13); wherein the sub-processing portions each comprise a receiving and transmitting unit for, respectively, receiving said predetermined packet data and transmitting said predetermined data to the next portion (col. 2, lines 29-44, col. 4, lines 50-67); a determining unit for determining whether a fault exists at any portion in said electronic device in accordance with whether said sub-processing portions normally receive said packet data transmitted from said main control portion; a transmitting unit for transmitting said test signal to said sub-processing portions via said signal line in case said determining unit determines that a fault exists; and a fault portion specifying unit for specifying a fault portion in said electronic device based on whether a test packet transferred to said main control portion is normally received, wherein said test packet is generated by said sub-processing portion in accordance said test signal (col. 2, lines 45-52, col. 3, lines 1-13, col. 5, lines 41-67, col. 6, lines 1-3).

Examiner asserts that the "I'm Alive message" is the test packet.

(2) With regard to claim 2, see rejection of claim 1. Meyers et al. further discloses in (Fig. 5) an electronic having connecting means for connect in a loop (col. 3, liens 52-58, col. 5, lines 41-67, col. 6, lines 1-3).

Examiner asserts that the bi-directional ports create the loop connection of the electronic device.

(3) With regard to claim 3, see rejection of claims 1 and 2.

(4) With regard to claim 4, claim 4 inherits all the limitations of claim 1. Meyers et al. further discloses wherein, in case that said determining unit determines that the fault exists, fault diagnosis is performed, starting from said sub-processing portion on the downstream of said connecting means that connects the main control portion to the sub-processing portions ((Fig. 5), col. 5, lines 41-67, col. 6, lines 1-3).

(5) With regard to claim 5, claim 5 inherits all the limitations of claim 2. Meyers et al. further discloses wherein, in case that said determining unit determines that the fault exists, fault diagnosis is performed, starting from said sub-processing portion on the downstream of said connecting means (col. 5, lines 41-67, col. 6, lines 1-3).

Examiner asserts that the fault diagnosis is provided between any two elements.

(6) With regard to claim 6, claim 6 inherits all the limitations of claim 3. Meyers et al. further discloses wherein, in case that said determining unit determines that the fault exists, fault diagnosis is performed, starting from said sub-processing portion on the downstream of said connecting means (col. 5, lines 41-67, col. 6, lines 1-3).

Examiner asserts that the fault diagnosis is provided between any two elements.

***Allowable Subject Matter***

6. Claims 7-16 are allowed.
7. The following is a statement of reasons for the indication of allowable subject matter: The instant application discloses an electronic device. Prior art references show similar methods but fail to teach: **"determining that an error exists if the data packet is not returned to the main control unit with a predetermined time; in the case that an error exists, generating a test signal via direct connections from the main control unit each of the first and second sub-processing units; and transmitting a test packet from each of said sub-processing units via the second and third data buses to the main control unit in order to determine the location of said error"**, as in claims 7, 9, 11, 13, 17 along with the remaining limitations of the independent claim.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 571-272-3047. The examiner can normally be reached on Monday – Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 571-272-3021. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*Cicely Ware*

cqw  
December 11, 2006



SUPERVISOR  
PATENT EXAMINER